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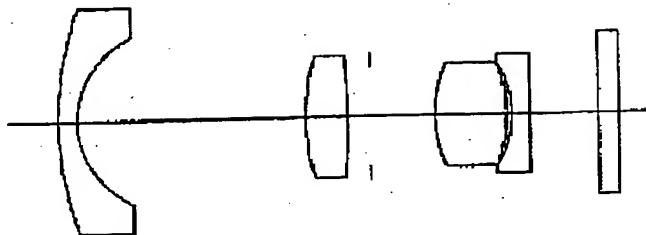
APPLICATION DATE : 16-03-92
APPLICATION NUMBER : 04089228

APPLICANT : KONICA CORP;

INVENTOR : SATO HIROSHI;

INT.CL. : G02B 13/04

TITLE : WIDE-ANGLE LENS



ABSTRACT : PURPOSE: To obtain an inexpensive and small wide-angle lens for a monitoring camera with a sufficiently practical aperture of an F number 2 other than the use in a particularly dark environment, while having a few lens component, a sufficiently long back focal length and a fully wide-angle with a viewing angle of nearly 90°.

CONSTITUTION: This lens is composed of four lens components in which a negative meniscus lens with a convex face on the object side, a biconvex single lens, a biconvex single lens and a negative lens with an intensive refracting surface on the object side are successively arranged from an object side and satisfies respective conditions below; $2.1 < (d_2 + d_3)/f < 3.3$, $-2.1 < f_1/f < -1.6$, $1.65 < n_1$. Where d_2 is spacing between the first lens and the second lens, d_3 is thickness of the second lens, f_1 is focal length of the first lens, f is composite focal length, n_1 is refractive index of the first lens.

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